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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,733	12/18/2001	Jeanine Picraux	10017782-1	4649

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EXAMINER

LESNIEWSKI, VICTOR D

ART UNIT PAPER NUMBER

2152

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/029,733	PICRAUX, JEANINE	
	Examiner	Art Unit	
	Victor Lesniewski	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-18 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-18 and 20-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 11/15/2005 has been placed of record in the file.
2. Claims 1, 9, 12, 23, and 24 have been amended.
3. The rejection of claims 9-11 and 24 under 35 U.S.C. 112 is withdrawn in view of the amendment.
4. The rejection of claims 2, 10, 13, and 21 under 35 U.S.C. 112 is withdrawn in view of the applicant's arguments.
5. Claims 8 and 19 have been canceled.
6. Claims 1-7, 9-18, and 20-24 are now pending.
7. Some of the applicant's arguments with respect to claims 1-7, 9-18, and 20-24 have been rendered moot in view of the applicant's amendment and the following new grounds of rejection.
8. Those arguments still relevant to the claims have been fully considered but they are not persuasive. A detailed discussion is set forth below.

Claim Rejections - 35 USC § 102

9. Claims 9-11, 20-22, and 24 remain rejected under 35 U.S.C. 102(b) as being clearly anticipated by Grivna et al. (U.S. Patent Number 5,949,799), hereinafter referred to as Grivna, as presented in the previous action dated 8/17/2005.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2152

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-7, 12-18, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grivna in view of Keller (U.S. Patent Number 6,748,442).

12. Grivna disclosed a minimum latency data mover that embeds a response in the data flow thereby enabling transmission of the next packet without first waiting for complete transmission of an incoming packet. In an analogous art, Keller disclosed a method for inserting control data into the data flow on a packet based network communication link.

13. Concerning claims 1, 12, and 23, Grivna did not explicitly state a communication link having multiple channels for transmitting multiple data transactions. However, it was well known in the art for a communication link to include multiple channels. This is evidenced by Keller's system which maintains multiple channels across a communication link. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Grivna by adding the ability to use a communication link having multiple channels for transmitting multiple data transactions as provided by Keller. Here the combination satisfies the need for a reduction in latency issues that occur with the transfer of both regular packet data and command data across communication links. See Grivna, column 1, lines 38-47 and Keller, column 1, lines 56-67. This rationale also applies to those dependent claims utilizing the same combination.

14. Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a system or a computer-readable medium are rejected under the same rationale applied to the described claim.

15. Thereby, the combination of Grivna and Keller discloses:

- <Claims 1, 12, and 23>

A method for transmitting information from a second node to a first node, comprising the steps of: establishing a communication link between the first node and the second node (Grivna, column 2, lines 63-65); the communication link having multiple channels for transmitting multiple data transactions (Keller, column 6, lines 27-57); allowing one or more data transactions transmitted on the communication link between the first node and the second node (Grivna, column 6, lines 25-34); identifying a data stream of a data transaction being transmitted from the second node to the first node (Grivna, figure 5, "Outbound Packet"); stalling the transaction at any time during the transaction (Grivna, column 5, lines 57-66); saving a status of the transaction at the time the transaction is stalled (Grivna, column 5, line 57 through column 6, line 6); inserting the information into the identified data stream without regards to a boundary of the transaction (Grivna, column 5, lines 57-66); and based on the saved status, resuming the transaction, thereby transmitting the information from the second node via the data stream to the first node (Grivna, column 6, lines 1-6); wherein the information is not part of the data transaction when the data transaction starts from the second node to the first node (Grivna, column 5, lines 1-9).

- <Claims 2 and 13>

The method of claim 1 further comprising the step of running the first node and the second node at two different frequencies (Keller, column 5, lines 31-37).

- <Claims 3 and 14>

The method of claim 1 further comprising the step of including instructions in the information for the first node to perform a task (Grivna, column 3, lines 48-59).

- <Claims 4 and 15>

The method of claim 3 wherein the task includes one or a combination of resending some data, removing the first node, removing a part of the first node, restarting the first node, resetting the first node, notifying the first node, authorizing the first node (Grivna, column 3, lines 48-59).

- <Claims 5 and 16>

The method of claim 1 further comprising the step of sending the information in a packet normally used for synchronizing the first node and the second node (Grivna, column 3, lines 48-59).

- <Claims 6 and 17>

The method of claim 1 further comprising the step of sending the information in a packet that is not counted as part of the data stream being transmitted from the second node to the first node (Grivna, column 6, lines 15-21).

- <Claims 7 and 18>

The method of claim 1 wherein the first node and the second node are selected from a group consisting of a computer system, a network device, a microprocessor, and an electronic chip (Grivna, column 6, lines 25-34).

Since the combination of Grivna and Keller discloses all of the above limitations, claims 1-7, 12-18, and 23 are rejected.

Response to Arguments

16. In the remarks, the applicant has argued:

- <Argument 1>

Grivna does not disclose “inserting the information into the identified data stream without regards to a boundary of the transaction” as recited in claim 1.

- <Argument 2>

Grivna does not disclose “saving a status of the transaction at the time the transaction is stalled” as recited in claim 1.

- <Argument 3>

Grivna does not disclose “sending the information in a packet normally used for synchronizing the first node and the second node” as recited in claim 5.

- <Argument 4>

Grivna does not disclose the features of claim 9 because he does not disclose “the first node, based on data in the header, counting the data pieces to identify the end of the transaction” as recited in claim 9.

17. In response to argument 1, Grivna does disclose inserting the information without regards to transaction boundaries. The line citation, column 5, lines 57-66, clearly shows information insertion into the data stream. Specifically, control information is inserted into a data packet. Grivna states “transmission of the packet characters is suspended on the next character boundary,” however this meets the limitation in question. Here, the character boundary is within

Art Unit: 2152

the data packet. Thus it is clear that the information is inserted without regards to transaction boundaries (i.e. without waiting for the end of the data packet or the end of a series of packets).

18. In response to argument 2, Grivna does disclose saving a status of the transaction. The line citation, column 6, lines 1-3, clearly shows resuming the transmission of the packet from the place in which the packet was stalled. Although, the system does not state specifically storing a status identifier or such, the system clearly saves the status as the transaction is resumed from the interrupt point. Grivna clearly states that “no data is lost,” meaning that the transaction is held at a certain point (or the status is remembered) so that the remainder of the transaction may eventually be transferred appropriately.

19. In response to argument 3, Grivna does disclose sending the information in a packet normally used for synchronizing. The line citation, column 3, lines 48-59, clearly shows that embedding command information into a packet can be done with a synchronize command, or SYNC, as well as with other varied commands. It is maintained that a SYNC meets the limitation of “a packet normally used for synchronizing the first node and the second node”.

20. In response to argument 4, Grivna does disclose all the features as recited in claim 9. The previous line citation, column 3, lines 19-27, shows the use of framing characters to identify the end of a transaction. A framing character at the beginning of a packet (data in the header) enables the system to know where the packet starts. Thus, the system tracks the packet (i.e. counts the data pieces of the packet) until reaching an equivalent end of packet (EOP) framing character. This concept is well known in the art of packet transfer and as used by Grivna satisfies the limitation in question.

Art Unit: 2152

21. In addition, the applicant has argued that claims rejected under 35 U.S.C. 102 and 35 U.S.C. 103, but not explicitly discussed, are allowable based on the above arguments. Thus, claims disclosing similar limitations to the discussed claims and related dependent claims remain rejected under the same reasoning as presented above.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

- Quattromani et al. (U.S. Patent Number 6,026,444) disclosed a method for inserting control codes into a message packet in a system that improves bandwidth efficiency and message packet latency rates.
- Darnell et al. (U.S. Patent Number 6,266,702) disclosed an insertion controller for inserting data values into a frame transmitted to a plurality of nodes.

23. The applicant's amendment necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). The applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2152

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number is 571-272-3987.

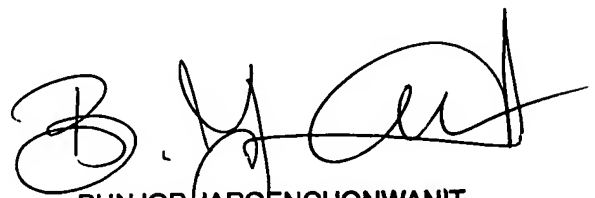
The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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SUPERVISORY PATENT EXAMINER